Q. IF THE COMMISSION CONSIDERS ADOPTING CHARGES FOR COOPERATIVE TESTING, SHOULD THOSE CHARGES APPLY IN CONNECTION WITH LINE SHARING?

A. No, they should not. As we have explained, there is no justification for adopting Verizon's proposed cooperative testing charges in the first place. However, under no circumstances would such charges be applicable in connection with line sharing, which makes use of existing (working) lines.

Q. IF THE COMMISSION CONSIDERED ADOPTING CHARGES FOR COOPERATIVE TESTING, SHOULD IT BASE THOSE CHARGES ON VERIZON'S COST STUDIES?

A. No. Verizon has built up this charge from task time estimates that include a total (prior to application of occurrence factors) of *****BEGIN VERIZON PROPRIETARY ** END VERIZON PROPRIETARY***** minutes of labor time,[150] which substantially overstates the average time that efficient testing and coordination should take on a forward-looking basis. In addition, Verizon has applied an occurrence factor of more than 100% to the verification of dial tone.[151] The result, a whopping *****BEGIN VERIZON PROPRIETARY ** END VERIZON PROPRIETARY***** minutes merely to "verify that TC dial tone is present on the assigned facility" is patently absurd, particularly for already working lines (as are required for line sharing). Verifying dial tone requires

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150 Verizon VA Wholesale Non-Recurring Costs Model, Tab 76.

151 *Id.*

nothing more than clipping two leads to the subscriber terminal at the MDF and dialing a simple code on a hand set that Verizon technicians routinely carry with them.

V. THE COMMISSION SHOULD REJECT VERIZON'S PROPOSED "CONDITIONING" CHARGES.

Q. WHAT TYPES OF "CONDITIONING" CHARGES DOES VERIZON PROPOSE TO ASSESS NEW ENTRANTS THAT SEEK TO PROVIDE ADVANCED SERVICES IN VIRGINIA USING UNBUNDLED DSL-CAPABLE LOOPS?

A. Verizon has proposed four basic charges for loop "conditioning." For bridged taps in excess of 6,000 feet, Verizon proposes a charge of $243.37 when only one bridged tap needs to be removed [152] and a charge of $587.55 when multiple bridged taps need to be removed from a loop (of less than 18 kilofeet). For removal of load coils on a loop of between 18 and 21 kilofeet,[153] Verizon proposes a charge of $1,017.95; for removal of load coils on a loop of between 21 and 27 kilofeet, Verizon proposes to charge $1,352.54. In addition to these basic

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[152] Verizon has not proposed to charge for removal of bridged tap over 6,000 feet on loops less than 18,000 feet. It is entirely appropriate for Verizon to remove bridged tap that exceeds its own design standards without charge. However, the offer to remove bridged tap in excess of 6,000 feet does not go far enough to meet the engineering design standards. The Carrier Serving Area ("CSA") design standard, which has been in place since 1980, limits the total amount of bridged tap on a line to 2,500 feet. Moreover, a prior design standard, the Serving Area Concept ("SAC") in place since 1972, called for bridged tap to be minimized.

[153] Verizon has not proposed to charge for removal of load coils from loops under 18,000 feet.

charges, Verizon proposes to charge $640.47 for the Engineering Work Order purportedly required to provide "conditioning." This charge would be applied to *every* "conditioning" job.

In addition, Verizon has proposed an "Add Electronics" charge that would apply to some ISDN/IDSL loops.

Q. SHOULD THE COMMISSION PERMIT VERIZON TO IMPOSE ITS PROPOSED NON-RECURRING "CONDITIONING" CHARGES ON COMPETITORS?

A. No. Verizon's proposed non-recurring "conditioning" charges are fundamentally inconsistent with the economic principles that guide the pricing of all unbundled network elements, including DSL-capable loops in at least three important respects. First, Verizon's proposed "conditioning" charges do not reflect an efficient, forward-looking network architecture. Second, the combination of Verizon's proposed recurring charges and its proposed non-recurring "conditioning charges would recover more than the total forward-looking economic cost of a "conditioned" loop. For both of these reasons, Verizon should not be allowed to impose *any* non-recurring "conditioning" charges on competitors. Third, Verizon's proposed "conditioning" charges do not reflect the tasks and task times that an efficient carrier would experience for removing load coils and excessive bridged tap. Thus, even if it were appropriate to levy a non-recurring "conditioning" charge, it would not be appropriate to allow Verizon to impose the high charges that it has proposed.

A. VERIZON'S PROPOSED "CONDITIONING" CHARGES ARE NOT FORWARD-LOOKING.

Q. IS THE NETWORK ARCHITECTURE ON WHICH VERIZON HAS BASED ITS NON-RECURRING "CONDITIONING" CHARGES FORWARD-LOOKING?

A. No. The premise that Verizon must remove load coils, excessive bridged taps or repeaters to render a loop suitable for the provision of DSL-based services is based on Verizon's embedded network. A forward-looking network architecture would not contain such load coils, excessive bridged tap or repeaters because they violate the network engineering guidelines in place for over two decades.[154] Indeed, the recurring loop cost studies Verizon submitted to the Commission do not include any load coils and reflect cable sizing that is sufficient to provide dedicated facilities for all existing and reasonably foreseeable loop demand without resorting to the use of bridged tap. Thus, Verizon has admitted that a forward-looking network would not require "conditioning" to provision DSL-capable loops. Indeed, Verizon witness Francis J. Murphy argued in a recent Maryland universal service proceeding that minimization of "conditioning" costs is a critical attribute of a forward-looking network. According to Mr. Murphy:

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[154] A forward-looking network is designed to meet Carrier Serving Area ("CSA") guidelines, which have been the standard for more than 20 years. A network built to CSA guidelines does not include inhibitors such as load coils and excessive bridged taps that require loops to be "de-conditioned" before they can be used to provide DSL-based services.

> In its First Report and Order, the FCC mandated that ILECs condition loops for data transmission if technically feasible. Therefore, it is in the interest of both ILECs and their competitors that the forward-looking network used to provide both UNEs and basic service be constructed in a manner that will minimize conditioning costs.[155]

Verizon can only propose non-recurring "conditioning" charges by proposing that its non-recurring charges be based on a different network architecture that is not forward-looking and does not "minimize conditioning costs" in the way that its own witness has advocated.

As Ms. Murray explains in both her direct testimony and her separately filed rebuttal to Drs. Gordon and Shelanski, the assumption of different network architectures in the recurring and non-recurring cost studies for the same network element violates the Commission's requirement for total cost minimization and creates a significant risk of double-counting.

Q. HAVE ANY STATE REGULATORS COME TO THIS CONCLUSION?

A. Yes, several state commission have agreed that, given the network architecture in Verizon' recurring cost study, no "conditioning" charge are appropriate. The Massachusetts Department of Telecommunications and Energy recently concluded that Verizon's proposed "conditioning" charge was not consistent with its

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[155] Rebuttal Testimony of Francis J. Murphy on behalf of Verizon Maryland in Maryland Public Service Commission Case No. 8745, May 21, 2001, at 22.

recurring costs.[156] The Public Service Commission of Maryland similarly found that:

> Based upon the Commission's and the FCC's pricing guidelines, rates for the line sharing UNE are required to be based upon a forward-looking network. In such a network, loop conditioning, or rather de-conditioning, would not be required for a fiber-fed loop, and the only existing copper loops would be less than 18,000 feet for which Verizon has indicated there will be no charge.
>
> As noted earlier, Verizon has argued that the FCC's *Line Sharing Order* expressly allows them to recover loop-conditioning costs. The Commission disagrees with this interpretation. The FCC's directives related to recovery of loop conditioning costs are only relevant to states that have assumed copper feeder for purposes of calculating forward looking costs. The FCC has not directed states to assume copper feeder in calculating these costs. Without such a directive, it would be illogical for the FCC to mandate recovery of costs that are relevant only to a network assumption that may not have been approved in a particular state.[157]

The Utah Public Service Commission has likewise found that:

> A TELRIC model (or a forward-looking, efficient provider) would not design a network that required loops to be conditioned or groomed before services today's customers expect could be provided. It follows, and we so conclude, that the buyer of an unbundled loop should not have to pay for any such upgrading: the price of the loop presupposes sufficient quality, by which is meant a loop capable

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156 *Massachusetts Order* at 103.

157 Public Service Commission of Maryland Order 76852 at 34-35, footnotes excluded.

> of meeting not just current demands but demands for advanced services as well. Accordingly, we disallow charges for line conditioning or grooming.[158]

B. VERIZON SUBSTANTIALLY INFLATES LOOP "CONDITIONING" COSTS BY FAILING TO INCORPORATE EFFICIENT ENGINEERING PRACTICES IN ITS COST STUDIES.

Q. ARE VERIZON'S PROPOSED "CONDITIONING" CHARGES REASONABLE?

A. No. Even assuming that it were consistent with TELRIC principles to levy a non-recurring "conditioning" charge, Verizon's proposed "conditioning" charges are excessively high. Including the exorbitant "Engineering Work Order" charge that Verizon would impose for each "conditioning" job, Verizon has proposed charges of $883.84 for removing one bridged tap, $1,228.02 for removing multiple bridged taps, and $1,658.42 and $1,993.01, respectively, for removal of load coils from loops of between 18 and 21 kilofeet and between 21 and 27 kilofeet. Moreover, these charges do not include the excessive loop "qualification" charges that Verizon would likely impose before "conditioning" could even begin.

These non-recurring charges are sufficiently high that they would, if adopted, create an almost insurmountable barrier to entry in Virginia for DSL providers seeking to serve customers with either long loops or shorter loops that

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158 Utah Public Service Commission Phase III Part C Report and Order in Docket No. 94-999-01, issued June 2, 1999, footnote omitted. An electronic copy of this order is available at http://www.psc.state.ut.us/telecom/99orders/jun/9499901ro.htm#N_4_.

happen to have excessive bridged taps. Verizon's proposed non-recurring "conditioning" charges are so high that they exceed, in some cases by many multiples, the entire forward-looking cost to build a new unbundled loop. These proposed "conditioning" charges reflect unreasonably high cost estimates, even for the "conditioning" of outdated, embedded plant.

Q. IS THE METHODOLOGY ON WHICH VERIZON HAS BASED ITS PROPOSED NON-RECURRING "CONDITIONING" CHARGES A RELIABLE BASIS FOR SETTING PRICES?

A. No. Verizon derived its work-time estimates for "conditioning," as it did for most of its non-recurring cost estimates, by surveying its employees across the region. As we have already indicated, Verizon committed numerous errors in survey design, data collection and data processing. Our examples have shown that many of these errors are particularly egregious with respect to "conditioning" activities, contributing to the inflation of Verizon's study results and rendering those results useless for estimating efficient costs.

Similarly, although Verizon's cost panel asserts that "typical occurrence factors and forward-looking adjustment factors were applied to obtain forward-looking time estimates for the work activities required to complete the specific qualification and conditioning tasks,"[159] this does not appear to be the case with respect to "conditioning" or "Engineering Work Order" work-steps. Verizon

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[159] Verizon Cost Panel Direct at 140.

assigned an occurrence factor of less than 100% to only one task included in the "conditioning" studies, "send tone." In addition, Verizon made no forward-looking adjustments to any of its estimated "conditioning" times. In both respects, Verizon's methodology is severely flawed, as we demonstrate in Attachment A.

Q. IS THERE ONE MAJOR FLAW IN VERIZON'S APPROACH THAT IS RESPONSIBLE FOR MOST OF THE GAP BETWEEN VERIZON'S REPORTED COSTS AND THE COST TO "CONDITION" A LOOP BY REMOVING LOAD COILS OR BRIDGE TAP USING EFFICIENT ENGINEERING PRACTICES?

A. Yes. Verizon has greatly inflated its reported costs by developing those costs as if it would "condition" loops one-at-a-time. For example, Verizon assumes that it will remove load coils pursuant to each specific request and would remove the load coil from an individual loop. To the contrary, it is a standard, efficient engineering practice to deload more than entire binder groups (typically 25 loops) at one time. Similarly, it is unusual and inefficient to remove bridge tap one-loop-at-a-time as Verizon's assumes will always be the case.

For numerous reasons, which we explain in detail in Attachment A, the Commission should base any charge for removing load coils on the assumption that Verizon will, on average, deload 25 pairs at a time on loops longer than 18,000 feet. Similarly, the Commission should assume that Verizon will, on average, unbridge 50 pairs at a time.

Q. ON WHAT BASIS COULD THE COMMISSION ESTABLISH "CONDITIONING" CHARGES THAT REFLECT ENGINEERING PRACTICES GENERALLY EMPLOYED IN THE TELECOMMUNICATIONS INDUSTRY AND REASONABLY EFFICIENT TASK TIME ESTIMATES?

A. The Commission could establish such charges based on the tasks and work-times presented in Attachment A. Working in collaboration with Mr. John C. Donovan, Mr. Riolo developed the alternative tasks and task time estimates supplied in Attachment A based on over thirty years of personal experience in performing such operations and in supervising others who performed such operations. Attachment A also contains restated tasks and work times for the Engineering Work Order element. (As we noted above, Verizon proposes to levy an Engineering Work Order charge for each individual "conditioning" order.)

Our analysis shows that the total average time for removing all load coils from a loop is just over 22 minutes per pair and that the total average time for removing a bridged tap from a loop is just over one minute per pair. At a labor rate of $45, for example, a load coil removal charge of $16.63 per pair and a bridged tap removal charge of $0.89 would apply.[160]

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[160] This discussion uses an illustrative labor rate, which is intended to be conservative, to show an upper bound for efficient "conditioning" costs that does not need to be treated as proprietary. It is a simple matter to substitute any adopted labor rate and any applicable shared and common cost to develop a final, Verizon-specific result.

Q. DO YOU PROPOSE THAT THE VALUE OF THE RESTATED ENGINEERING WORK ORDER COST BE ASSUMED FOR EACH SERVICE REQUEST THAT REQUIRES "CONDITIONING"?

A. No. Should the Commission decide to compensate Verizon for an engineering cost associated with "conditioning" loops, the Commission should recognize that an efficient company would only need to issue one Engineering Work Order for each job to "condition" multiple loops. Thus, at most, the Commission should only allow Verizon to recover the restated Engineering Work Order cost on a "per unit basis," with the cost spread across the average number of loops to be "conditioned" per order. Based on a hypothetical labor rate of $45 per hour, the Engineering Work Order would add from $0.90/pair to $1.86/pair ($45 per hour multiplied 1.2 and 2.48 minutes per pair, respectively) for removing load coils and from $0.45/pair to $0.93/pair for removing bridged tap ($45 per hour multiplied 0.6 and 1.24 minutes per pair, respectively).

C. VERIZON'S PROPOSED NON-RECURRING CHARGE TO "ADD ISDN ELECTRONICS (REPEATER) IS YET ANOTHER EXAMPLE OF DOUBLE-COUNTING AND EXCESSIVE COSTS.

Q. PLEASE DESCRIBE VERIZON'S PROPOSED NON-RECURRING CHARGE TO ADD ISDN ELECTRONICS (REPEATER).

A. Verizon proposes a non-recurring charge of $1,118.11 to "Add Electronics" that would be required to provision ISDN-type service over longer all-copper loops. A substantial portion of Verizon's direct cost estimate for this element consists of the material cost for the repeater itself. The remainder of Verizon's reported cost is for engineering, central office and outside plant technician time required to

install the repeater system. With Verizon's proposed Engineering Work Order charge, the total charge for Add ISDN Electronics would be $1,758.58.

Q. IS VERIZON'S PROPOSED ADD ELECTRONICS CHARGE REASONABLE?

A. No. First, as is the case with Verizon's costs for loop "qualification" and "conditioning," Verizon's reported non-recurring cost for this element is duplicative of costs recovered through its recurring charges for digital (*i.e.,* ISDN or IDSL-capable) loops. Verizon's existing forward-looking recurring costs for the digital line would already include the cost for the required electronics — regardless of loop length. Furthermore, ISDN repeaters are required for long copper facilities, but not for the fiber and DLC systems assumed in the approved forward-looking recurring cost studies for unbundled loops. Competitors are paying more for ISDN loops than for analog loops, and the increment that competitors are paying on a recurring basis to Verizon reflects the costs of providing ISDN over fiber for loops of all lengths. Verizon's proposed non-recurring charge is for the exact same capability—but under the assumption of a different, all-copper network. For the reasons we previously discussed, Verizon should not be allowed to assume fiber-fed DLC in its recurring cost analysis and, at the same time, propose a hefty non-recurring charge to recover the cost of repeaters needed to provide ISDN-type services over longer copper loops that would not even exist in the forward-looking network architecture assumed in the recurring cost study.

Second, Verizon should have treated the repeater material cost as a recurring cost, as the company would ordinarily treat its other loop investments. A repeater is a relatively discrete network component, with a high degree of reusability or "fungibility." There is no valid reason to assume that Verizon could not use the same repeater to serve a future customer at the same location, or else reuse the repeater to provide ISDN services to a different wholesale or retail customer of the company. Indeed, the repeater that Verizon uses for a competitor tomorrow could well be one that it removed from service from one of its retail customers last week. It is therefore discriminatory and anticompetitive for Verizon to treat the repeater investment entirely as an up-front, non-recurring cost when it is being used to provide service to new entrants.

Third, Verizon's Cost Panel admits that the "cost of the investment is Verizon VA's actual, *current* purchase price for the electronics."[161] Verizon's proposed charge is not forward-looking in any respect.

Q. DOES VERIZON'S COST PANEL TESTIMONY ILLUSTRATE HOW COSTS CAN BE DOUBLE-COUNTED AS THE RESULT OF APPLYING INCONSISTENT ASSUMPTIONS TO DIFFERENT ELEMENTS?

A. Yes. Verizon's assertion at page 163 that it has not double-counted ISDN costs provides an instructive example. Verizon attempts to rebut our argument here by asserting that it did not already include the cost "of extension electronics for use

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[161] Verizon Cost Panel Direct at 162, emphasis added.

on copper loops" in its recurring cost study. Verizon's claim, while literally true, is highly misleading.

Verizon did not include the costs for copper-based extension technology in its recurring costs because it did not include any long copper loops in its study. Hence, Verizon assumed that no loops that could use copper-based extension technology would exist in its forward-looking network. Verizon did, however, include costs for the same functionality based on the loop design that it did include in its study. Instead of using copper, Verizon assumed that long ISDN-capable loops would be provided over fiber. It therefore added the substantial additional cost for the electronics required to support ISDN over fiber to the recurring cost of all long ISDN-capable loops.

Putting together the two parts of Verizon's proposal, Verizon would include the cost of both copper and fiber ISDN extension technology in the cost of every ISDN-capable loop that a competitor purchases. This is a straightforward case of double-counting that is, in part, masked by Verizon's disjointed approach to developing recurring and non-recurring costs.

Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION CONCERNING THE ADD ISDN ELECTRONICS (REPEATER) CHARGE?

A. The Commission should reject Verizon's proposed ancillary charge for Add ISDN Electronics (Repeater).

VI. VERIZON'S PROPOSED LOOP "QUALIFICATION" COST ANALYSIS IS INAPPROPRIATE.

Q. HOW HAS VERIZON PROPOSED TO PROVIDE LOOP "QUALIFICATION" DATA TO COMPETITORS?

A. Verizon has proposed three separate loop "qualification" elements in this proceeding: (1) Mechanized Loop Qualification through which competitors would access Verizon's automated loop qualification database, for which Verizon proposes a monthly recurring per link charge of $0.26; (2) Manual Loop Qualification in which Verizon would "qualify" a loop manually, for which Verizon proposes a non-recurring charge of $114.52; and (3) an Engineering Query through which a competitor would be able to obtain more specific loop makeup information, for which Verizon proposes a non-recurring charge of $139.42.

Q. WHAT COSTS IS VERIZON'S MECHANIZED LOOP QUALIFICATION CHARGE INTENDED TO RECOVER?

A. Verizon's proposed monthly recurring charge for Mechanized Loop Qualification is designed to recover the cost of creating and maintaining an automated loop qualification database that the company designed to provide a "yes/no" indication regarding DSL qualification as determined by Verizon for its former xDSL retail offerings, as well as the costs of updating Verizon's legacy databases with loop qualification information.

Q. IS IT REASONABLE TO EXPECT COMPETITORS TO FUND THE DEVELOPMENT OF VERIZON'S LOOP QUALIFICATION DATABASE?

A No. It is not appropriate to impose the costs of developing of Verizon's retail database on competitors. Even if Verizon had designed the database in a manner that facilitated the wholesale provision of qualified DSL-capable unbundled loops, rather than to benefit Verizon's retail operations, then as an economic matter, those costs would fall within the scope of the competition-onset costs that AT&T/WorldCom's Recurring Cost Panel discusses in its concurrently-filed rebuttal testimony with respect to Verizon's access to OSS charges. To the extent that Verizon would not otherwise have incurred such costs in the routine course of doing business from a forward-looking perspective (*e.g.*, to upgrade and improve the efficiency of the incumbent's own operations), Verizon should recover such competition-onset costs in a competitively neutral manner.

Furthermore, information provided by a Verizon VA affiliate makes clear that the LFACS updates for which Verizon seeks to charge new entrants would actually have a lasting benefit for all subsequent service orders involving that loop an thus should not be imposed solely on competitors. According to Verizon-New York:

> In order to ensure that a request for an ADSL-qualified loop can be processed on a mechanized basis, loop make-up information and the Count Qualification code must be present in the LFACS

> database. *This information is used by LFACS to assign a facility with the appropriate characteristics based upon the type of service requested.*[162]

The cost of such database updates appears to be a significant portion of Verizon's mechanized loop qualification cost.[163] Thus, it appears that Verizon is attempting to force new entrants to fund its efforts to clean-up and update its embedded databases that are useful for retail as well as wholesale service. Thus, insofar as it is appropriate to include *any* costs for database updates, Verizon should have treated those costs as recurring costs spread over the relevant total increment of demand, namely, all loops in its service territory.

Moreover, Verizon should not have included these database update costs in any portion of a forward-looking, long-run cost study, because Verizon should have been entering this information routinely into LFACS. If Verizon had maintained its LFACS records in a complete manner, it would not be necessary for Verizon to perform the update activities at the time a new entrant ordered a DSL-capable loop.

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[162] Verizon-New York's Response to RL-BA-5 in NYPSC Case 98-C-1357 (emphasis added).

[163] *See* Verizon Exhibit Part B-13 at Workpaper 3.

Q. IS VERIZON'S PROPOSED MECHANIZED LOOP QUALIFICATION CHARGE APPROPRIATE?

A. No. Verizon designed its mechanized loop qualification database specifically around the needs of its retail DSL operations. Verizon's database is less useful to competitors and is more expensive than would be read-only access to Verizon's underlying databases. Verizon's current mechanized loop qualification porcess provides a summary "yes/no" indicator that reports whether the loop in question meets the technical requirements of Verizon's retail ADSL offering, "Infospeed DSL." Such an indicator, specific to the equipment of Verizon's vendor and the deployment decisions that Verizon has made for its own (or its affiliate's) retail service offering, is clearly not relevant to a competitor's service offerings. Furthermore, it masks the underlying loop makeup data that Verizon's own engineers must evaluate to determine the suitability of particular loops for Verizon's retail ADSL service. It seems that Verizon envisions that this more detailed loop makeup information would only be available to competitors at a heavy premium through the manual loop qualification or engineering query process.[164]

The Commission should require Verizon to provide direct read-only access to the databases that Verizon's own personnel use, via an electronic interface. We acknowledge that Verizon is making efforts to expand the

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[164] *See, e.g.*, Verizon Cost Panel Direct at 128-129 and 136-137.

information included in its mechanized loop qualification database to take some account of additional information that competitors might require to do their own qualification.[165] Providing that additional detail is not the same as providing competitors with equal access to the underlying data that Verizon can access to develop its own qualification processes. All that competitors seek is to have read-only access to this underlying data, which Verizon admits exists in LFACS and similar databases. At a minimum, competitors should only have to pay for the mechanized access to LFACS, not for Verizon's separate mechanized loop qualification database, which it developed based on retail needs, not the needs of competitors.

Q. IS DIRECT READ-ONLY ACCESS TO VERIZON'S DATABASES WITH LOOP MAKEUP INFORMATION FEASIBLE?

A. Yes. It is entirely feasible for Verizon to provide a direct read-only access to LFACS and similar databases, where much of the basic information that a competitor would need to determine whether a loop is qualified for its intended DSL application resides.[166] Verizon field operations personnel have been able to obtain such access for years.

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165 *See, e.g.,* Verizon Cost Panel Direct at 130.

166 *See* Verizon-New Jersey's Response to Covad Request 1-43, New Jersey BPU Docket No. TO00060356.

Even Verizon accepts that there is not any activity associated with loop qualification that a competitor with trained and experienced personnel could not perform on its own behalf if it had access to the same records, databases, and test systems.[167] Given such access, many or all of the engineering activities for which Verizon seeks compensation through loop "qualification" charges would be unnecessary.

Q. IS VERIZON'S REPORTED MECHANIZED LOOP QUALIFICATION COST PROBLEMATIC IN ANY OTHER RESPECT?

A. Yes. Although Verizon's study shows task times per line, Verizon has admitted that it does not actually perform any of the related tasks on a line-by-line basis. Instead, Verizon issues electronic commands and performs batch tasks that affect numerous lines at a time. Whatever information Verizon might have used to derive the artificial per-line task times that appear in its study is still entirely hidden. Therefore, not only is it impossible to check the logic of Verizon's conversions, it is also impossible to investigate if Verizon's results are within the realm of reason. That is the case because no one at Verizon has ever performed line-by-line tasks that actually correspond with the times shown in the study.

It is clear that the study erroneously amortizes costs over the expected duration of an individual competitor's lease of that loop to provision xDSL-based

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167 *See* Verizon-New Jersey's Response to WorldCom Request 3-25, New Jersey BPU Docket No. TO00060356.

services. This modeling assumption understates the useful life of the information in the database. The loop makeup data related to the line will remain in the database, and subsequent competitors can use that same information to determine whether to obtain that unbundled loop to provision xDSL-based service to the same end-user or any future end-user served by the same loop facility.

Finally, from a cost-causation perspective, it makes more sense to charge for loop qualification on a per-query basis, just as Verizon charges for other database queries.

Q. WHAT IS AN APPROPRIATE FORWARD-LOOKING COST-BASED PRICE FOR ACCESS TO LOOP MAKEUP INFORMATION, BASED ON EFFICIENT ELECTRONIC ACCESS TO THAT INFORMATION?

A. As Ms. Murray discussed in her direct testimony, the forward-looking cost of providing loop makeup information electronically per query should be *de minimis*. Therefore, Verizon should not levy a separate charge for access to loop makeup information.

Q. IS IT APPROPRIATE FOR VERIZON TO CHARGE COMPETITORS FOR MANUAL LOOP QUALIFICATION OR AN ENGINEERING QUERY?

A. No. A forward-looking cost study of access to loop makeup information should assume that competitors have nondiscriminatory access to databases providing information relevant to loop makeup. Therefore, the Commission should reject

Verizon's proposed Manual Loop Qualification and Engineering Query charges.[168]

Q. WHAT INFORMATION DOES VERIZON PROPOSE TO PROVIDE AS PART OF MANUAL LOOP QUALIFICATION?

A. Verizon's proposed Manual Loop Qualification function would provide a competitor some limited additional information beyond that contained in the basic fields of the database. As a result of the manual loop qualification process, "the CLEC will be advised if the loop is qualified for xDSL *per Verizon standards*."[169]

Q. WHEN DOES VERIZON PROPOSE TO APPLY ITS PROPOSED NON-RECURRING CHARGE FOR MANUAL LOOP QUALIFICATION?

A. Not only would Verizon apply the manual charge when a competitor specifically requests the level of information that it provides, but it is our understanding that Verizon also would impose the Manual Loop Qualification charge for loops in central offices that have yet to be added to the company's mechanized loop qualification database.

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[168] Should a carrier request the information manually or require some level of detail that would not normally be mechanized, it might be appropriate to apply a manual charge for that specific case.

[169] Verizon Cost Panel Direct at 137, emphasis added.

Q. IS IT REASONABLE FOR VERIZON TO CHARGE COMPETITORS FOR MANUAL LOOP "QUALIFICATION" IN THIS MANNER?

A. No, it is not. Manual loop qualification for loops in central offices that have yet to be input into the electronic database is clearly an interim, inefficient process and therefore is not, by definition, a charge based on *long-run* costs. Moreover, providing Verizon compensation for whatever manual, inefficient process it invents for competitors creates the wrong incentive. As long as Verizon can pass along to its competitors the cost of whatever manual, short-run processes it imposes, the company will have every incentive to delay implementation of more efficient, electronic interfaces. Indeed, with such a pricing policy, Verizon will have an incentive to delay implementing mechanized handoffs for all future provisioning enhancements related to new services so as to keep the costs of its potential rivals artificially inflated. Thus, the Commission should not permit Verizon to assess a manual loop "qualification" charge for competitors to obtain information that should be available in the short run (let alone in the long run) in a mechanized fashion.

Q. SHOULD THE INFORMATION THAT COMPETITORS REQUIRE BE UBIQUITOUSLY AVAILABLE IN VERIZON'S MECHANIZED SYSTEMS?

A. Yes, with rare exceptions. It should be possible to access data regarding the majority of loops from existing legacy systems such as LFACS; there should be no need to develop new loop makeup databases or to update existing databases.

Incumbents installed loop inventory management databases such as LFACS, in different forms, over 20 years ago. The incumbents use these databases to assign loops; therefore, the databases contain at least some loop makeup information on each and every loop. Although the incumbents did not fully populate these databases with all the categories of loop makeup data at their inception, it has long been standard within the industry that all plant changes should be input to the databases on a going forward basis. The incumbents' engineering personnel were supposed to enter the modified loop makeup of existing plant into the database any time the plant was altered. Given the frequency of plant additions, changes, rearrangements, and removals over the past 20+ years, the necessary loop makeup data for virtually all of the Verizon's plant should now reside in the relevant databases.

To the extent that information needed for loop qualification resides only in Verizon's "plats" (which are paper plant records), rather than in electronic databases, it reflects Verizon's failure to populate its databases as it should have given the upgrades that Virginia ratepayers have been funding for years.

Q. IF THE LOOP MAKEUP INFORMATION IS MISSING FROM VERIZON'S DATABASES, WHO SHOULD BEAR THE COSTS FOR MANUALLY OBTAINING THE INFORMATION?

A. It is Verizon's responsibility to follow its own practices for fully and accurately populating its databases, and maintaining those databases in such a way that they contain accurate information. The costs for populating and maintaining OSS databases have traditionally been passed on to consumers as part of recurring

costs. In a competitive environment, the incumbent should pay for error correction, should it be found that existing practices are either not being followed, or are not being done accurately. If loop qualification information that should have been in LFACS is missing, then Verizon should obtain the appropriate information, correct its own database(s), and provide the information to the requesting carrier, in an expeditious manner, without new charges being imposed on the competitor. If anything, Verizon should be compensating the competitor for harmful delay associated with waiting for the information to be obtained manually, rather than via a real-time mechanized interface.[170]

Q. IS VERIZON'S ENGINEERING QUERY CHARGE REASONABLE?

A. No, it is not. The cost support for Verizon's proposed Engineering Query charge contains tasks that would not occur given a forward-looking, least-cost analytical framework, and also assumes task times which appear to be excessive. These assumptions have inflated Verizon's claimed costs for this activity beyond a reasonable level.

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[170] Moreover, even if the Commission does not hold Verizon accountable for providing access to the information that is supposed to be in its databases, it might be substantially more efficient simply to allow the competitor to test lines for loop qualification for themselves when mechanized records are not available, as opposed to Verizon's extreme proposed costs for looking up data on paper records.